

No.

9300289



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Northrup King Co.**

Whereas, THERE HAS BEEN PRESENTED TO THE

**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT OF 1930, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Coker 9134'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this 29th day of April in the year of our Lord one thousand nine hundred and ninety-four.

Attest:

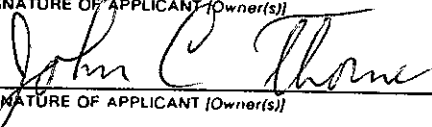
*Rennett H. Cross*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Mike Long*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

<b>1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)</b>  Northrup King Co.		<b>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.</b>  C 87-13wh	<b>3. VARIETY NAME</b>  Coker 9134
<b>4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)</b>  P.O. Box 959 Minneapolis, MN 55440		<b>5. PHONE (include area code)</b>  612/593-7333	<b>FOR OFFICIAL USE ONLY</b> <b>PVPO NUMBER</b>  9300289
<b>6. GENUS AND SPECIES NAME</b>  Triticum aestivum	<b>7. FAMILY NAME (Botanical)</b>  Gramineae		<b>FILING</b> Date <u>Aug. 16, 1993</u> Time <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.
<b>8. CROP KIND NAME (Common Name)</b>  Soft red winter wheat	<b>9. DATE OF DETERMINATION</b>  1986		<b>FEES</b> Filing and Examination Fee: \$ <u>2325.00</u> Date <u>Aug. 16, 1993</u> Certificate Fee: \$ <u>275.00</u> Date <u>April 1, 1994</u>
<b>10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)</b>  Corporation		<b>RECEIVED</b>	
<b>11. IF INCORPORATED, GIVE STATE OF INCORPORATION</b>  Delaware	<b>12. DATE OF INCORPORATION</b>  1976		
<b>13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS</b>  Northrup King Company P.O. Box 949 Washington, IA 52353-0949 Attn: John Thorne			
<b>14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)</b> a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement. c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety. d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of Variety. e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership. f. <input checked="" type="checkbox"/> Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office _____ g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."			
<b>15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See section 83(a) of the Plant Variety Protection Act.)</b> <input type="checkbox"/> YES (If "YES," answer items 16 and 17 below) <input checked="" type="checkbox"/> NO (If "NO," skip to item 18 below)			
<b>16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO		<b>17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?</b> <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
<b>18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?</b> <input type="checkbox"/> YES (If "YES," through <input type="checkbox"/> Plant Variety Protection Act <input type="checkbox"/> Patent Act. Give date: _____) <input checked="" type="checkbox"/> NO			
<b>19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?</b> <input checked="" type="checkbox"/> YES (If "YES," give names of countries and dates) <u>U.S.A. Fall of 1992</u> <input type="checkbox"/> NO			
<b>20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.</b> The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) 		CAPACITY OR TITLE <u>Res. Dir. - Self-pollinated Crops</u>	DATE <u>7-27-93</u>
SIGNATURE OF APPLICANT (Owner(s))		CAPACITY OR TITLE	DATE

# Coker 9134 Application

## Exhibit A

### Origin and Breeding History

<u>SEASON</u>	<u>GENERATION</u>	<u>ACTIVITY</u>
Spring '80		Cross made (Saluda and Coker 797)
1980-81	F <sub>1</sub>	Grown in field and bulked
1981-82	F <sub>2</sub>	Grown in field and bulked
1982-83	F <sub>3</sub>	Space planted in field and selected for rust and mildew resistance.
1983-84	F <sub>4</sub>	Heads selected from bulk population
1984-85	F <sub>5</sub>	Head row #85HR34913 selected
1985-86	F <sub>6</sub>	Line tested as 86B180 (prelim trials)
1986-87	F <sub>7</sub>	Tested as advanced line C87-13 in replicated trials.
1987-88	F <sub>8</sub>	Tested as elite line and in Uniform Southern Nursery
1988-89	F <sub>9</sub>	Seed from winter hardy head rows increased and bulked to form C 87-13wh
1989-90		Tested as elite line, re-entered USN, and small increase block planted
1990-91		Tested as elite line and in USN; large increase block planted
1991-92		Testing continued in Company tests and in state trials; turned over to Production Department
1992-93		Seed sold to TGN seed growers/dealers

Breeder seed was developed by bulking seed tracing back to 25 F<sub>9</sub> head rows that had been maintained separately for 3 generations of increase for purity and uniformity comparisons. These head rows were selected for semi-prostrate growth habit.

Coker 9134 is stable and uniform except that in some environments a few plants (approximately 15/10,000) may break dormancy sooner than the others. These plants may subsequently be shorter and earlier. We have also observed occasional awned plants (1/10,000) which we attribute to admixture or outcrossing.

## Coker 9134 Application

### Exhibit B

#### Novelty Statement

Coker 9134 most closely resembles Coker 9766 both morphologically and for reactions to major diseases and insect pests.

Grain of Coker 9134 has a significantly ( $P=.0003$ ) heavier test weight than Coker 9766. Coker 9134 is resistant to strains of leaf rust in Georgia and South Carolina which are virulent on Coker 9766. In the Southeast, Coker 9134 is approximately 3 days later than Coker 9766.

**Table 1. Distinguishing Characteristics**

<u>VARIETY</u>	<u>TEST WT (lb/bu)</u>	<u>HEADING DATE (from April 1)</u>
Coker 9134	55.5	11
Coker 9766	53.0	8
No. of tests	18	8*
LSD (.05)	1.2	2.3
C.V. %	3.0	4.8

\*6 locations - 1991-92

2 locations - 1990-91

Georgia, South Carolina, Alabama

#### LEAF RUST

<u>VARIETY</u>	<u>91-92 (%) PLAINS, GA</u>	<u>91-92 (0-9) GRIFFIN, GA</u>	<u>89-90 (0-5) HARTSVILLE, SC</u>
Coker 9134	0	1	0
Coker 9766	60	9	1
Coker 9907	15	4	1
Coker 9835	20	2	1
Coker 9227	0	3	5

Leaf Rust Ratings are:

Plains, GA = percent of leaf coverage

Griffin, GA = 0-none; 9-severe

Hartsville, SC = 0-none; 5-severe

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
COMMODITIES SCIENTIFIC SUPPORT DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY  
WHEAT (TRITICUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Northrup King Company

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

P.O. Box 959

Minneapolis, MN 55440

attn: John Thorne

FOR OFFICIAL USE ONLY

PVPO NUMBER

9300289

VARIETY NAME OR TEMPORARY  
DESIGNATION

Coker 9134

Place the appropriate number that describes the varietal character of this variety in the boxes below.  
Place a zero in first box (e.g.,  or ) when number is either 99 or less or 9 or less.

1. KIND:

1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:

1 = SPRING 2 = WINTER 3 = OTHER (Specify)  1 = SOFT 3 = OTHER (Specify)  
2 = HARD

1 = WHITE 2 = RED 3 = OTHER (Specify)

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

FIRST FLOWERING  LAST FLOWERING

4. MATURITY (50% Flowering):

NO. OF DAYS EARLIER THAN  1 = ARTHUR 2 = SCOUT 3 = CHRIS 7 = Florida 302

NO. OF DAYS LATER THAN  4 = LEMHI 5 = NUGAINES 6 = LEEDS 8 = Coker 9766

5. PLANT HEIGHT (From soil level to top of head):

CM. HIGH

CM. TALLER THAN

CM. SHORTER THAN  1 = ARTHUR 2 = SCOUT 3 = CHRIS 7 = Saluda  
4 = LEMHI 5 = NUGAINES 6 = LEEDS 8 = Coker 9877

6. PLANT COLOR AT BOOTING (See reverse):

1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHUR COLOR:

1 = YELLOW 2 = PURPLE

8. STEM: \*Purpling of peduncle may occur just prior to maturity.

Anthocyanin: 1 = ABSENT 2 = PRESENT

Vaxy bloom: 1 = ABSENT 2 = PRESENT

Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

Internodes: 1 = HOLLOW 2 = SOLID

NO. OF NODES (Originating from node above ground)

CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES: \*Except under cool temperatures stress where purpling occurs.

Anthocyanin: 1 = ABSENT 2 = PRESENT

Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

Flag leaf at booting stage: 1 = ERECT 2 = RECURVED  
3 = OTHER (Specify):

Flag leaf: 1 = NOT TWISTED 2 = TWISTED

Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

Vaxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

MM. LEAF WIDTH (First leaf below flag leaf)

CM. LEAF LENGTH (First leaf below flag leaf)

## 11. HEAD:

☐ 3 Density: 1 = LAX 2 = DENSE 3 = Mid-dense

☐ 2 Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE  
4 = OTHER (Specify) \_\_\_\_\_

☐ 2 Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

☐ 7 Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED  
5 = BROWN 6 = BLACK 7 = OTHER (Specify): tan
☐ 0 ☐ 9 CM. LENGTH ☐ 1 ☐ 1 MM. WIDTH

## 12. GLUMES AT MATURITY:

☐ 3 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.)  
3 = LONG (CA. 9 mm.)

☐ 3 Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.)  
3 = WIDE (CA. 4 mm.)

☐ 2 Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED  
4 = SQUARE 5 = ELEVATED 6 = APICULATE

☐ 2 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

## 13. COLEOPTILE COLOR:

☐ 3 1 = WHITE 2 = RED 3 = PURPLE

## 14. SEEDLING ANTHOCYANIN:

☐ 2 1 = ABSENT 2 = PRESENT

## 15. JUVENILE PLANT GROWTH HABIT:

☐ 2 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

## 16. SEED:

☐ 3 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL to ovate

☐ 1 Check: 1 = ROUNDED 2 = ANGULAR

☐ 2 Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

☐ 1 Brush: 1 = NOT COLLARED 2 = COLLARED

☐ Phenol reaction: 1 = IVORY 2 = FAWN 3 = LT. BROWN  
(See instructions): 4 = BROWN 5 = BLACK

☐ Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) \_\_\_\_\_

☐ 0 ☐ 7 MM. LENGTH ☐ 0 ☐ 3 MM. WIDTH ☐ 3 ☐ 4 GM. PER 1000 SEEDS

## 17. SEED CREASE:

☐ 2 Width: 1 = 60% OR LESS OF KERNEL 'WINOKA'  
2 = 80% OR LESS OF KERNEL 'CHRIS'  
3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

☐ 2 Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT'  
2 = 35% OR LESS OF KERNEL 'CHRIS'  
3 = 50% OR LESS OF KERNEL 'LEMHI'

## 18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

3 = Moderately susceptible 4 = Moderately resistant

☐ 3 STEM RUST  
(Races) \_\_\_\_\_

☐ 2 LEAF RUST  
(Races) \_\_\_\_\_

☐ 1 STRIPE RUST  
(Races) \_\_\_\_\_

☐ 0 LOOSE SMUT

☐ 4 POWDERY MILDEW

☐ 0 BUNT

☐ 4 OTHER (Specify) Septoria nodorum

## 19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☐ 0 SAWFLY

☐ 0 APHID (Bydv.)

☐ 0 GREEN BUG

☐ 0 CEREAL LEAF BEETLE

☐ OTHER (Specify) \_\_\_\_\_

 HESSIAN FLY  
RACES:

☐ GP

☐ A

☐ B

☐ C

☐ D

☐ E

☐ F

☐ G

## 20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Coker 9766	Seed size	Coker 9766
Leaf size	Coker 9766	Seed shape	Coker 9766
Leaf color	Coker 9766	Coleoptile elongation	Coker 9766
Leaf carriage	Coker 966	Seedling pigmentation	Coker 9766

## INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (a) L.W. Briggie and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.
- (b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

# Coker 9134 Application

## Exhibit D

### Milling and Baking Quality

All quality evaluations have been conducted by the USDA Soft Wheat Quality Lab at Wooster, Ohio. Scores have varied from fair to good for milling and baking parameters. Scores are adjusted to a standard known to exhibit excellent quality.

### TEST IDENTITY

Table 2. Milling and Baking Qualities

<u>Milling Parameters</u>	1990 USN		1991 CE		1990 CE	
	<u>9134</u>	<u>FL302</u>	<u>9134</u>	<u>FL302</u>	<u>9134</u>	<u>FL302</u>
Test wt (lb/bu)	61.4	59.9	59.9	58.3	61.6	60.1
Break flour yield	34.1	32.2				
Red. pas	7	7				
St.gr. flour yield	76.5	77.9	75.0	77.2	74.8	77.2
Friability	28.6	30.1				
E.S.I.	10.0	8.8				
Softness equiv.			61.6	58.8	58.4	53.5
Millability	105.76	122.02				
Score	86.2	100.0	95.5	100.0	95.8	100.0
<u>Baking Parameters</u>						
Flour protein %	9.32	9.29	9.65	8.82	10.12	10.78
Flour ash %	0.418	0.392				
Micro AWRC %	53.2	52.8	58.7	56.5	57.4	52.7
Cookie dia. cm	17.31	17.48	17.3	17.5	17.2	17.0
Top Grain	4	4	2	4	1	1
Score	95.17	100.0	92.2	100.0	93.2	100.0

USN - Uniform Southern Soft Wheat Nursery

CE - Northrup King's Commercial Elite Test

BULK LOT - Composite from semi-prostrate type head-row progeny.

### Leaf Rust Resistance

Leaf rust ratings were made in 1992 by David Long; USDA-ARS Cereal Rust Lab; University of Minnesota; St. Paul, MN. The reaction of Coker 9134 to 12 isolates is shown in Table 3.

TABLE 3

## LEAF RUST TEST:

Twelve isolates of leaf rust were inoculated into these lines, representing common virulence combinations that were identified from collections made throughout the U.S. The single gene lines we compared to include Lr 1, 2a, 2c, 3a, 9, 10, 11, 16, 17, 18, 24, 26, 30, 3ka.

Variety	Reaction Produced by Isolates Rust Isolates Possible												Lr genes
	LBBQ	DBBL	BGDL	PBMG	PLMQ	MDGL	TFBL	TDBL	TBGL	TDJQ	TLGG	MBGB	
NKPro 812	;lc	;	3	;	;lc1	;lc	;lc	2c	;lc	3	;lc	;lc	16
NKPro 814	3	;	;	3	;lc	3	;	3	;	3	3	3	1+
Coker 9877	0;	;	;	;	;	;	;	;	;	;	;	;	9,24(?)
Coker 9024	0;	;	;	;	;lc2	;	;	;	;	;	3	;	9,11
Coker 9105	;	;	;	;	;lc1	;	;	;lc	;	;	3	;	9,11
Coker 9803	X	;2	;lc	X	X	3	3	X	X	3	;lc	;	+
Coker 9835	;	;	;	;	;	0;	;	;	;	;	3	;	9,11
Coker 9907	;	;	0;	;	;	;	0;	;	;	;	3	;	9,11
Coker 9543	X	;	;	X	;	3	;lc	;lc	3	2c-3	2c-3	3	3,11+
Coker 9134	X	X	;lc	X	X	3	;2	;2	3	3	3	3	3,11
Coker 9904	;	;	;	;	;	;	;	;	;	;	3	;	9,11
Coker 9474	;	;	;	;	3	;	;	;	;	;	3	;	9
Coker 9766	;	;	;	;	;lc	;	;	;	;	;	3	;	9,11
Coker 983	3	;2	;lc	X	3	X	X	X	X	3	;lc	;	10,18
Coker 916	X	X	;	1	;lc	3	X	3	3	3	;	;	10,11+
Coker 747	X	3	;lc	3	3	;lc	3lc;	3lc	X	;lc2c;lc	3	;	10+
Coker 762	;	;	;	;	;	;	;	;	;	;	3	;	9,11
Coker 9227	;lc	1	;lc	X	;lc2	;lc	;lc2	;lc	;	3	3	;	11,18
Coker 9323	;	;	;	;	;	;	;	;	;	;	3	;	9,11
Coker 9733	;	;	;	;	;	3	3	3	;	3	;	;	24
Coker 833	;	;	;	;	3;	;	;	;	;	;	;	;	9,24?
McNair 1003	3	3	3	3	3	3	3	3	3	3	--	3	0
TN 101	;	;	;	;	X	;	;	;	;	;	3	;	9,11
L 860434	;	;	;	;	X	;	;	;	;	;	3	;	9,11

DATA FROM: David Long  
 USDA-ARS Cereal Rust Lab  
 University of Minnesota  
 St. Paul, MN



TABLE 3 continued

Variety	LBBQ	DBBL	BGDL	PBMG	PLMQ	MDGL	TFBL	TDBL	TBGL	TDJG	TLGG	MDGB	gene
L 870537	3	3	3	3	3	3	3	3	3	3	3	;	0
L 881060	;	;	;	;	;	3	3	3	;-3	3;1c	;	;	24+
L 890682	X	X	X	--	X	3	X	X	3	--	3x	;	10,11
L 890690	;	;	;	;	;	;	;	;	;	;	3	;	9,11
L 890714	;	;	;	;	;	;	;	;	;	;	;	;	11,26+
L 900819	;-3	;-3	;	;	3;	;	;-3	;	;	;-3	;	1c2 ;2	+

\* Lr 34 Adult plant gene

# VIRULENCE FORMULA      Virulence/Avirulence

LBBQ	Lr1, 10, 18/2a, 2c, 3, 9, 11, 16, 17, 24, 26, 30, 3Ka
DBBL	Lr2c, 10/1, 2a, 3, 9, 11, 16, 17, 18, 24, 26, 30, 3Ka
BGDL	Lr10, 16, 17/1, 2a, 2c, 3, 9, 11, 18, 24, 26, 30, 3Ka
PBMG	Lr1, 2c, 3, 18, 30, 3Ka/2a, 9, 10, 11, 16, 17, 24, 26
PLMQ	Lr1, 2c, 3, 9, 10, 18, 30, 3Ka/2a, 11, 16, 17, 24, 26
MDGL	Lr1, 3, 10, 11, 24/2a, 2c, 9, 16, 17, 18, 26, 30, 3Ka
TFBL	Lr1, 2a, 2c, 3, 10, 24, 26/9, 11, 16, 17, 18, 30, 3Ka
TDBL	Lr1, 2a, 2c, 3, 10, 24/9, 11, 16, 17, 18, 26, 30, 3Ka
TBGL	Lr1, 2a, 2c, 3, 10, 11/9, 16, 17, 18, 24, 26, 30, 3Ka
TDJQ	Lr1, 2a, 2c, 3, 10, 11, 17, 18, 24/9, 16, 26, 30, 3Ka
TLGG	Lr1, 2a, 2c, 3, 9, 11, 18/10, 16, 17, 24, 26, 30, 3Ka
MBGB	Lr1, 3, 11/2a, 2c, 9, 10, 16, 17, 18, 24, 26, 30, 3Ka

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**EXHIBIT E****Statement of the Basis of Applicant's Ownership**

Soft Red Winter Wheat variety Coker 9134 was developed by the Northrup King Company cereals breeding staff from germplasm sources cited in Exhibit A of this application. Northrup King Company believes that the variety is novel as defined in the Plant Variety Protection Act and, therefore, that Northrup King Company is the sole owner of the variety.